Honorable Kathleen H. Burgess, Secretary  
New York State Department of Public Service  
Three Empire State Plaza  
Albany, NY 12223-1350  

November 12, 2018  

Subject: Case 18-E-0018 – In the Matter of Proposed Amendments to the New York State Standardized Interconnection Requirements (SIR) for Small Distributed Generators  

Case 15-E-0751 – In the Matter of the Value of Distributed Energy Resources  

Dear Secretary Burgess:  

On June 19, 2018, the Joint Utilities1 (“JU”) filed a proposed model tariff2 for compensation of a hybrid energy storage system (“ESS”) and distributed generation system interconnected with the three-meter configuration approved in the New York Public Service Commission’s (“Commission”) April 19, 2018 Order.3 In response to Borrego and other stakeholders’ comments on the proposed tariff, the JU filed additional comments on October 22.4 Those comments raised several new arguments that merit a brief response. We respectfully request that the Commission consider the following supplemental comments in its decision on this issue.  

As a preliminary matter, we note that the Commission has not yet directly addressed the unique compensation and accounting issues raised by Borrego and others—indeed, the lack of  


clarity about these fundamental issues has been a key barrier to adoption of hybrid systems in New York. The JU’s assertion that the Commission has previously addressed these issues is true, but misleading. Although the JU filed general comments suggesting a framework for accounting for hybrid systems in 2017, the Commission deferred approval of the JU’s proposal and found that “the utility proposals present different methods of determining value and compensation based on different technical system designs. Some further analysis, particularly of the technical aspects of those methods, is appropriate.” This docket is the first opportunity for the Commission to consider and determine these key technical questions about how crediting for hybrid systems should occur. Notably, the utility proposals considered by the Commission in its September 14, 2017 Order were never noticed for public comment until now. Given the importance of allowing all stakeholders to provide input on these complex, important questions, it is essential that the Commission not allow itself to be bound by a preliminary indication of support in a prior order that was based on a single set of high-level comments from one set of stakeholders without consideration of the views of other stakeholders.

Additionally, the JU’s comments do not dispute Borrego’s central claim that the Model Tariff’s Option 2c fails to accurately compensate clean distributed energy that has been used to charge the energy storage system and then subsequently discharged into the grid. The JU do not present an alternative approach to address this fundamental flaw in their tariff language. Rather, they argue that Borrego’s accounting proposals would result in hybrid systems providing inaccurate data to NYGATS and an overcounting of the green energy produced. However, Option 2c, as proposed by the JU, would also result in inaccurate reporting of REC-eligible energy to NYGATS. In addition, the JU proposal likely would miscredit the hybrid system’s green and brown power to a greater degree than either of Borrego’s two alternative proposals. We also take issue with the assertion that capacity value Alternatives 1 and 2 necessarily entail cost-shifts to non-participating customers. As discussed below, the JU have provided no credible evidence for this assertion.

Given the importance of providing clarity to the market about the precise mechanisms for crediting hybrid renewable energy plus energy storage systems, we urge the Commission to lay out a detailed proposal that provides near-term certainty for how grid-connected hybrid resources will be credited. We are concerned that failure to address the precise mechanisms for crediting these systems could lead to continued uncertainty and a proliferation of inconsistent approaches across the state that would be suboptimal for the market and the state’s clean energy goals. Borrego has provided two detailed proposals, along with revisions to the JU’s proposed tariff language that will allow for swift implementation of these proposals. Should the Commission determine that more information be needed in order to provide the needed details to the market, we suggest that the Commission convene a technical conference to develop a full and robust record upon which the Commission may issue a decision.

A. Electron Tagging and the Interim De Minimis Solution

The JU claim that the fact that energy storage systems dissipate a small amount of energy through variable losses, battery degradation, and parasitic load renders Borrego’s Electron

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Tagging proposal impossible to implement. The argument appears to be that energy consumed by the generating system cannot be accounted for, and could lead to more or less energy being credited as green or brown power. However, these losses are typically less than 15%, and are therefore minimal compared to the battery’s energy flows as a whole. Moreover, any losses can be accurately measured and accounted for, if necessary, with the appropriate metering configuration. Even without metering, such losses could be estimated to a high degree of certainty and could be accounted for in the utilities’ monthly crediting. These concerns do not pose a fatal flaw to Borrego’s preferred long-term solution. These concerns also would not be relevant for Borrego’s simpler ITC-tied de minimis interim solution, discussed below, which would credit energy based net injections at the point of common coupling meter. Under that approach, any system losses due to a battery’s degradation of charge over time, parasitic load, or variable losses due to inverter inefficiencies would not be credited under the ITC-tied de minimis proposal.

The JU also claim that the ITC-tied de minimis accounting method, proposed as an interim measure, would “create uncertain[ty] concerning the validity of the data reported in NYGATS,” but they fail to explain why Option 2c – the “brown washing” option – would not create just as much, if not more uncertainty in the monthly renewable generation data provided to NYGATS. Under the ITC and current compensation structures, co-located energy storage systems are incentivized to charge as much as possible with energy drawn from the solar PV system. Indeed, it is reasonable to expect that most hybrid PV + storage systems deployed in New York over the next several years will charge almost exclusively from solar. Under Option 2c, this PV-charged energy when injected into the grid from the battery would not count as clean REC-eligible energy. Rather, it would be arbitrarily considered grid-charged brown power. Undercounting REC-eligible energy solely because it first passes through a battery, among other things, would artificially lower the supply of RECs. Were the tariff to treat battery-charged clean energy as grid-charged power, New York’s grid would have more clean energy than is accounted for in NYGATS. This, in turn, would increase the demand for RECs leading to higher costs that would be passed on to ratepayers. It is not clear to us why the Commission would determine that potentially overcounting clean energy generation by a small amount would create insurmountable difficulties with respect to REC reporting requirements, whereas undercounting such energy to a more extreme degree (as the JU proposal would do), while simultaneously under-crediting clean energy generators would be deemed acceptable.

Finally, the JU claim that the ITC provides no “assurance of performance after the five-year commitment period.” We agree that the IRS’ charging requirements would not affect ITC eligibility following the initial 5-year ITC period. However, to ensure that systems continue to operate in this fashion, the Commission could simply require that customers continue to demonstrate that the system meets the de minimis 25% grid charging threshold during the remaining years of the NEM or VDER tariff or their successors. System owners could be required to annually provide the same documentation to the utilities that they already provide to the IRS to demonstrate their compliance. Moreover, should the Commission determine that the interim de minimis solution should be replaced by a different approach, the JU and stakeholders will have at least five years (during which ITC eligibility requirements will ensure that hybrid systems comply with the 25% standard) to come up with an alternative. It is difficult to

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6 JU Comments, pgs. 5-6.
overemphasize the fragility of the nascent energy storage industry in New York, and the long-term damage that unfair or unclear rules at this early stage could have on the prospects for this industry’s growth in the state. We submit that given the technical questions and disagreements between the JU and the rest of the industry in this case, the Commission should err on the side of creating simple, fair, and easy-to-implement rules for crediting hybrid systems that primarily charge from renewable energy, while working with stakeholders to build a better mousetrap over the next several years as the industry matures and more refined technical solutions present themselves.

B. Capacity Value and Assertions of Cost Shifts

The JU claim that storage systems paired with eligible renewable power that are capable of grid charging would shift costs to non-participating customers if such systems were to elect Alternative 1 or Alternative 2 capacity value compensation. This allegation is far from certain, and in any case has not been demonstrated. The JU point to certain hypothetical scenarios in Con Edison territory under which systems opting for Alternative 2 “could receive as much as 64 percent more than the capacity value they provide.” However, any cost shift from customers with hybrid systems to other customers would depend on a hybrid system’s actual production during the NYISO peak hour, which would vary from year to year and project to project. For example, an ICAP Alt. 1 or Alt. 2-compensated solar PV + storage system that happens to dispatch its full capacity during the NYISO peak hour (which usually occurs within the 2pm-7pm summertime window) would receive less compensation than it would have under Alternative 3, and less than the actual capacity costs it avoids. In other words, it is entirely possible that hybrid systems will provide more value to ratepayers than they will be compensated for if they elect capacity value Alternatives 1 or 2 (i.e., the cost shift will go in the opposite direction from that apparently feared by the JU). From the developer’s perspective, the advantage of Alternatives 1 and 2 lie mainly in the reduced concentration of operational and financing risk (which would otherwise be heavily concentrated on a single, variable peak hour)—not in the higher credit values attainable under these options. In fact, these alternatives generally provide lower overall compensation than would Alternative 3 (if one could count on receiving credit for Alternative 3 in all years). This means that hybrid systems electing one of these alternatives could, in many cases, lead to “positive” cost shifts in which ratepayers would receive more capacity savings than the DER would receive in compensation. The Commission should be wary of basing any decision on unsupported allegations of a potential cost shift—particularly in this case, where the cost shift could well go in precisely the opposite direction from that asserted by the JU.

Conclusion

8 ICAP Alternative 2’s 460 peak summertime hour window was designed around the expected NYISO Peak Hour.
We thank the Commission for opportunity to provide supplemental comments on this important issue, and look forward to the speedy adoption of this tariff, along with the modifications described herein.

Sincerely,

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